How Important Is Cabling?

You may have heard the phrase "NO CHAIN IS ANY STRONGER THAN IT'S WEAKEST LINK". Well, audio/video signals are a prime example of this rule.

If you start with a 100% satisfactory signal and end up with a significant loss, chances are that you can improve that signal with better cabling techniques.

CABLE TYPES

The type of cable used is a major consideration, especially if you are making-up your own cables. Obviously the cable with the least amount of loss will be the best for your application. Many types of coaxial cable are available for many applications. The type generally used for VCR dubbing cables is "RG59/U". Even within this type there are other considerations such as Ohms, Velocity, Capacitance per Ft., Insulation and Center Conductor Guage. Usually the best RG59/U cable for video applications will be 75 ohm with a 20 to 22 guage stranded center conductor. If you plan to make your own cables, it would be best to experiment with only a few feet of each type before making a large investment.

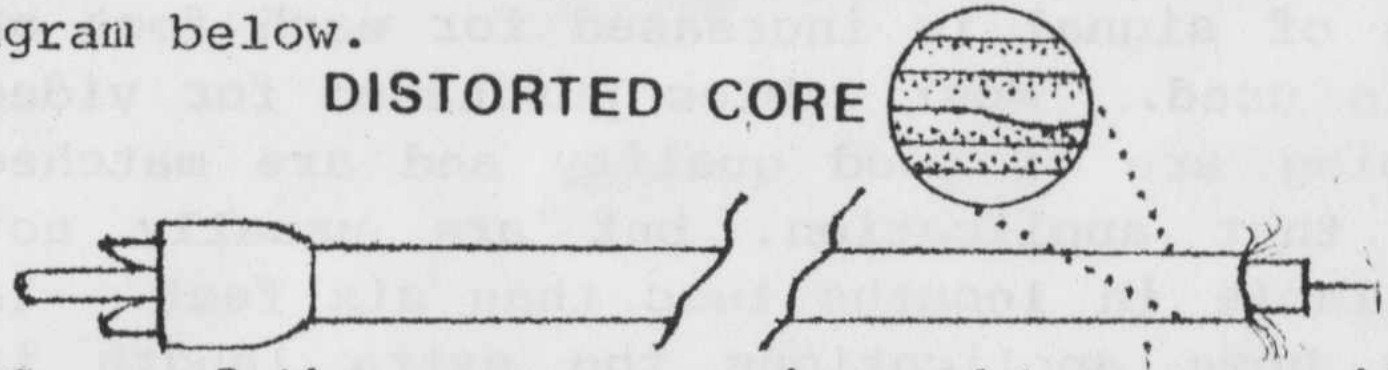
SIGNAL LOSS & INTERFERENCE

Loss of signal is increased for each foot of cable used. Most cables purchased for video dubbing are of good quality and are matched for that application, but are usually not available in lengths less than six feet. In many home applications the extra length is needed for routing behind bookcases, tables, etc. Excess cable will add to signal loss and many times pick up interference such as RF noise from a TV. Generally, the SHORTER the CABLE the CLEANER the SIGNAL.

CONNECTIONS

Most video dubbing cables have a standard RCA type phono plug on each end. If you can use a soldering iron, you can trim a cable to the desired length and resolder the plugs. An important consideration when doing this is to

make sure that when heating the end of the cable, your core insulation is not distorted. This could leave you with a worse signal problem or possibly a shorted cable. See diagram below.



Some of the more expensive cables come with gold plated connections. This is not intended to provide a status symbol for your equipment. Gold contact surfaces on plugs provide better conductive characteristics. A plug has a "self-cleaning" action when plugged-in and removed frequently. If plugs are left plugged in for prolonged periods, gold plated plugs are recommended because of low corrosion.

Another very important feature of the more expensive dubbing cables is "double shielding". This could make the difference between a "good" signal and a "fair" signal.